

## REMARKS/ARGUMENT

### Description of Amendments

Applicant has incorporated the subject matter of claim 4 into claim 1, and cancelled claims 4, 24, 25, 27-31, and 37. No new matter has been added. As amended, claims 1, 3, 5, 7-9, 32, and 36 are now pending and under examination.

### Rejections under 35 U.S.C. §101

In paragraphs 7.1-7.3 of the Office Action, claims 1, 3-5, 7-9, 24, 25, 27-32, 36, and 37 were rejected under 35 U.S.C. §101 on the ground that the method of each of claim 1, 24, and 32 contains abstract ideas such as producing first dynamic execution information and does not produce a tangible result. For the following reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection.

The rejection is deficient both in law and in fact. Regarding the law, the MPEP states only that “claims directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for patent protection” (see MPEP 2106 (IV)(C)) (emphasis added). The MPEP also states that “[i]n evaluating whether a claim meets the requirements of section 101, the claim must be considered as a whole to determine whether it is for a particular application of an abstract idea, natural phenomenon, or law of nature, and not for the abstract idea, natural phenomenon, or law of nature itself” (see MPEP 2106 (IV)(C)) (emphasis added).

The Examiner required that a “claim that can be interpreted to include both statutory and non-statutory embodiments must be amended to only include statutory interpretations” (see paragraph 7.3 of the Office Action). And the Examiner’s stated reason for rejecting the

claims is that one of each claim's limitations contains abstract ideas. Thus the Examiner apparently believes that a claim does not meet the requirements of 35 U.S.C. §101 if only one of the claim's limitations contains an abstract idea regardless whether the other limitations are directed to non-abstract ideas. However, the Examiner's belief is inconsistent with the above-stated requirements of the MPEP. If the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide the legal authority that supports his reading of the law.

It should be noted that many patents have claims that include various mathematical formulae such as the formula for a proportional-integral-derivative control algorithm, the formula for computing electric voltage from electric current and resistance, and many others. According to the Examiner, therefore, all these claims are unpatentable because they include a mathematical formula. If the Examiner maintains this rejection, Applicant respectfully requests that the Examiner provide the legal authority that supports his statement that "claim that can be interpreted to include both statutory and non-statutory embodiments must be amended to only include statutory interpretations."

Regarding the fact, the rejection is improper because the Examiner failed to consider each claim as a whole, as is required by the MPEP (see 2106 (IV)(C)). In fact, the Examiner did not even examine the "producing" step as a whole. The "producing" step does not simply recite "producing first dynamic execution information;" it actually recites "producing first dynamic execution information in response to executing the first set of one or more emulated instructions" (emphasis added).

Each claim, when considered as a whole, is clearly not directed to only abstract ideas. In fact, the "producing" step itself, when considered as whole, does not recite an abstract

idea. There is nothing abstract about producing information about the execution of a set of emulated instructions. The information manifests itself physically in the form of electric charges in a computer's memories and registers. The "producing" step involves the detection of the presence or absence of these electric charges.

Additionally, the Examiner merely concluded the "producing" step *appears* to contain abstract ideas, but provided no explanation on why the "producing" step is directed to abstract ideas. This, however, is legally insufficient, because USPTO personnel are required to identify and explain in the record the reasons why a claim is for an abstract idea. See, e.g., *In re Brana*, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995).

Furthermore, the claimed invention clearly achieves a tangible result in that it increases the speed of computer operation. The Examiner's conclusion regarding "tangible result" is improper (1) because no explanation was provided to support the conclusion and (2) because it was based on specific claim limitations (changing hardware emulation). The MPEP requires that "[i]n making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is 'useful, tangible, and concrete.' In other words, the claim must be examined to see if it includes anything more than a 35 U.S.C. 101 judicial exception." (see MPEP 2106 (IV)(C)(2)) (emphasis added).

#### Rejections under 35 U.S.C. §103(a)

The rejections are now moot because each rejected claim has been amended to incorporate the subject matter of claim 4 or 32, either directly or indirectly.

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Amendment dated April 15, 2007  
Reply to Office action of January 18, 2007

In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. Applicant petitions for a one-month extension of time, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 07-1850.

Respectfully submitted,

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